



SNS COLLEGE OF ALLIED HEALTH SCIENCES
SNS Kalvi Nagar, Coimbatore - 35
Affiliated to Dr MGR Medical University, Chennai



DEPARTMENT : PHYSICIAN ASSISTANT

SUBJECT NAME : ORTHOPAEDICS

UNIT : ONE (PRIMARY TUMORS)

TOPICS : EWING'S SARCOMA



EWING'S SARCOMA



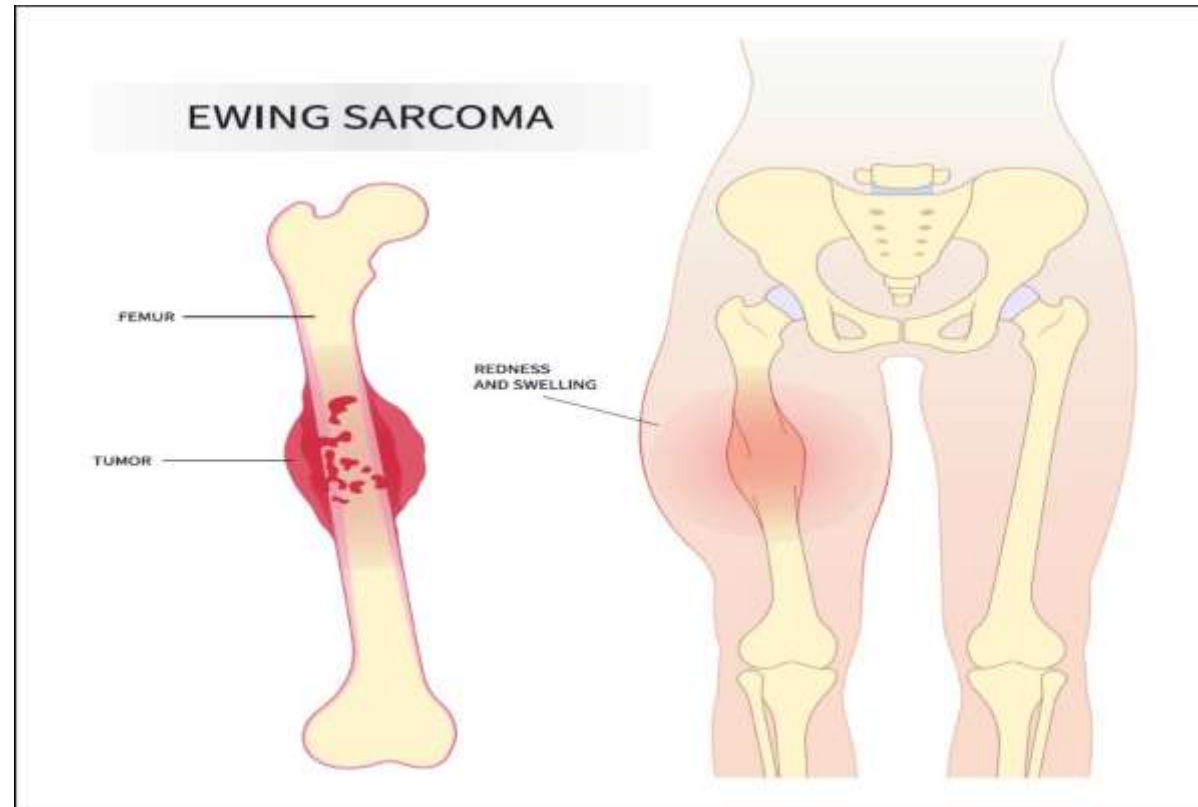
- Ewing's sarcoma is a rare primary malignant bone Tumor common in childrens and Adults. (4 to 25 year's)
- Also Known as small blue cell (round cell) tumors.
- Highly Malignant tumor (10-14% of all malignant bone tumors)



EWING'S SARCOMA



- It is a lethal tumor with a poor 5-year survival rate.
- Long bones affected are femur, tibia, fibula and humerus in that order. About 20 percent of tumors are seen in flat bones
- Diaphysis of the long bones is commonly affected.
- More Common in Males





EWING'S SARCOMA



- Ewing's sarcoma was first described by Ewing in the year 1928.
- James Ewing (1966-1943), Oncologist (USA). It was first described by Ewing in the year 1928.



ETIOLOGY (CAUSES)



- No known cause

RISK FACTORS

- Rapid bone growth
- Family History
- Bone trauma
- Radiation



SIGNS AND SYMPTOMS



- patient presents with pain
- tumor is diaphyseal and fixed to the bone
- skin is red
- Sometimes it shows symptoms like fever, sweating, chills, leucocytosis, and anemia.

This may create confusion as it mimics acute osteomyelitis.



METASTASIS



- It metastasis to blood stream and lymphatic spread is common
- Metastasis to other bones like skull, vertebrae, ribs, lungs, etc. may occur.



INVESTIGATIONS



- Xray - shows **onion peel appearance** and shows Diaphysial lesion with irregular destruction (**moth-eaten appearance or cracked ice appearance**)
- Onion peel appearance is also seen in Osteomyelitis Osteosarcoma , Malignant lymphoma





INVESTIGATIONS



- Biopsy (To confirm the Ewing's Sarcoma)



TREATMENT



- Chemotherapy
- Radiation therapy
- Surgery (limb preservation surgery and debulking of the tumors)

Combination of radiotherapy, chemotherapy and surgery has improved 2-year survival rate.



Unfavorable prognostic features are:

- Male patients.
- Humerus if involved.
- Pelvic bones if involved.
- Distant metastasis.



ASSESSMENT

1. What is Ewing's Sarcoma?
2. What is the diagnosis for Ewing's Sarcoma?



REFERENCE

Textbook of Orthopaedic - John Ebnezar



THANK YOU

